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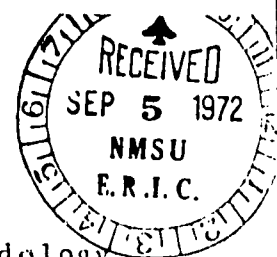
ED 067 211

RC 006 479

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 TITLE Agricultural Education in the Zaire: An Essay in the Methodology of Analysis and Evaluation.
 PUB DATE Aug 72
 NOTE 17p.; Paper prepared for the Third World Congress for Rural Sociology, Baton Rouge, Louisiana, August 1972
 EDRS PRICE MF-\$0.65 HC-\$3.29
 DESCRIPTORS *Agricultural Education; *Agronomy; Professional Training; *Program Evaluation; *Rural Areas; School Role; *Sociology; Teaching Procedures
 IDENTIFIERS *Zaire

ABSTRACT

The purpose of the research done in 1970-71 in 9 secondary agricultural schools in Zaire was to generate a system for analyzing agricultural education. For this purpose, how the agricultural school relates to the 4 main currents in sociology--the sociology of organization, of education, of occupation, and of "rural animation"--is considered. Studies were done on the training of agricultural technicians at Secondary Agricultural Technical Schools (SATS). The agricultural schools are examined in terms of sectors, institutions, and departments and in terms of roles and functions of the school. What is taught agronomic technicians being trained for public service, as private sector agents, and as instructors for professional agricultural training is discussed in terms of the type of material used, the practical tasks assigned, and the merits of visits to plantations versus visits to villages; and the professional choices open to agronomic technicians after graduating are considered. Localization of SATS and rural development are covered in terms of urban zone, peri-urban zone, urban couronne, and hinterland. Finally, the lack of prestige suffered by agricultural schools is discussed in terms of the organizational level, the contents of education, the occupational level, and the role of authority. (FF)



Agricultural Education in the Zaire: An Essay in the Methodology
of Analysis and Evaluation

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In tropical Africa, European penetration into the interior of the continent was very early provided with the service of numerous agronomists. Their aid made possible the promotion of the era of agricultural propaganda followed by agricultural "vulgarisation". These first policies of rural development, as conceived by engineers, were naturally of technical inspiration. Nevertheless, most of their promoters, immersed in experience due to their contact with African populations, felt the importance of the human factors which they attempted analysis in psychological terms. It was not until after the war that a new generation of field researchers, rural sociologists, took up in their turn this question of rural development and put instead the concepts of "développement communautaire" and "animation rurale". One of the battle fronts for rural development still remains, however, up to now, the lot of the agronomists alone: agricultural education, through its very function of transmission of technical knowledge, seems actually to call for the exclusive participation of the agronomists only. Now a review of the really vast literature devoted to the evaluation of these programs, signed by agronomists, leads to remark the recurrence of objections regarding the qualified successes gained by the various formulas that have been tried, or even their repeated failure. This fact is all the more disconcerting as the organisation of agricultural education has mobilized from the very beginning the treasures of imagination, of good will and persevering efforts. This shows that it is an otherwise more delicate job to train a "modern" cultivator than to make a plant grow.

In this connection the need has been felt to dispose of coherent and global schemes to help in the analysis and the evaluation of these institutions and thereby guide the imagination of those who are in the charge of them. It is in this line that is to be seen the excellent communication P.H. Coombs delivered at the first World Conference on Agricultural Education and Training held at Copenhagen in August 1970 (Coombs, 1970:160). Throughout his works for the International Conference on the World Crisis in Education held at Williamsburg (Virginia, USA) in October 1967 (Coombs, 1968), that eminent specialist in education traced out an application of the systems analysis proper to that really particular type of teaching that is agricultural education (Coombs, 1971).

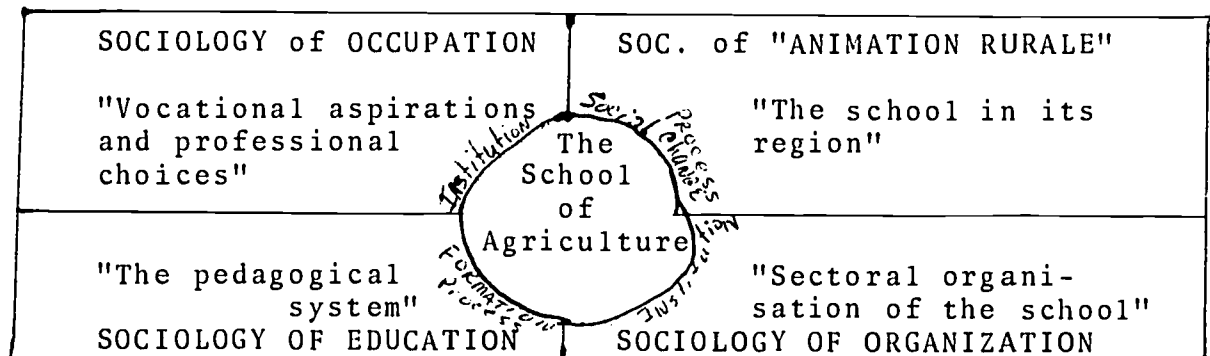
Third World Congress for Rural Sociology
Baton Rouge, Louisiana
August 1972

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This plan, stimulating and ambitious at the same time, still left numerous points in the dark; especially, and also admitted by its author (Coombs, 1970:158), it does not propose any means of measuring what is adaptable and efficacious. As far as we know, there doesn't exist, either, at the present moment, any other coherent scheme of analysis of agricultural education that is truly sociological. In this regard we have profitted from the demand made to us to carry out fundamental research about the agricultural schools of the Zaire in order to try to adapt the spirit of the proposal of Coombs about this concrete case.

Before presenting what is essential in the results of our research done in 1970 and 1971 in nine secondary agricultural schools, two remarks have to be made. On one hand, here we only study the formation of agricultural technicians, and not the professional training of farmers, whose problem is quite different and specific. On the other hand, our method throughout the research took the most pragmatic approach possible: rather than collating and analyzing the opinions of interested persons or even testing in the field some "working hypotheses", it has seemed preferable to keep as near as possible to factual and irrefutable observations. Of course, our method does not exhaust the subject; it aims only at offering a global view of analysis, the numerous instances of which will merit an exhaustive critical study.

In the first steps of our research, the unbelievable variety of questions raised drove us willingly to compare the problem of agricultural education to the well-known Place de l'Etoile Paris where you find yourself at the crossroad of numerous boulevards...to create no less celebrated traffic jams. However, on reflection, it seemed that the agricultural school is in fact at the crossways of the roads taken by four great currents in sociology: the sociology of organization, the sociology of education, the sociology of occupation and the sociology of "rural animation".



The two lower quarters adopt an internal point of view towards the agricultural school. It is regarded under two complementary modalities: the first is devoted to an institutional

approach which, under the theme of sectoral organization of the school, attempts an analysis of its structures in terms of the sociology of organization; the second, under the heading pedagogical system, is devoted to a social process, namely a process of education, with reference to the sociology of education.

However, with the risk of being incomplete, the research cannot stop there. Actually, the agricultural school is to be placed in a societal context: the upper part of the table presents the two aspects of this environment. On the one hand must be made clear the real constraints of the professional career of this institution which constitutes the social body of technical agronomists, under the cover of the sociology of occupation. On the other hand, the rural world is in itself marked by a profound process of social change of which such a type of establishment is often one of the catalysts. The heading school in the region will principally come under the title of the sociology of 'rural animation', and it will be devoted above all to the analysis of actions for rural development starting from some of these schools.

Seen this way, this scheme raises two kinds of critical questions. First of all on the methodological plane it calls for at least two sociological disciplines still in full elaboration at the present moment. Actually, if the sociology of organization and the sociology of occupation could as a whole pretend to have today acquired city rights, it is not the same thing with the sociology of education, which painfully seeks to free itself from education sociology (Banks, 1971:2), nor is it the case with the sociology of 'rural animation', which still has not yet been beyond its initial mutterings. On the other hand, on the epistemological plane, it is not just a matter of chance if the table presents both the aspects of internal functioning (below) as well as the aspects of external environment (above) as a combination of an institution and a process. It won't be difficult to prop up in a critical manner the solid basis of this presentation of the observed facts. But it would be worth remarking that this institution/process combination equally holds in the vertical direction: in this case, the left side concerns more directly the study of the problem of rural development in connection with the school. The justification of this presentation may demand prolonged reasoning which would be boring were we to indulge in them now.

From these few remarks it results that the phenomena encountered in the field could be classed in three categories according to the way they could be presented: 1) in the midst of one of the areas proposed; 2) by the conjunction of two or three areas, and particularly of an institution and a process;

3) by the joining up of the four areas. The systematic exposition of the whole of the results of our research cannot take place here. Since we had to choose, we have only retained on one side just four illustrations of the first category, and on the other side an example of a phenomenon which cannot be adequately grasped except under the light of the four sections of the plan.

I. Sectoral analysis of the agricultural school

A good part of the observations gathered in the field concerns the purpose itself of the installations of that establishment. Actually, it is clear that agricultural schools are educational establishments of a very particular type: differently from most other types of schools (literary, scientific, pedagogical,...), the agricultural school is built up by the ensemble of various elements of which the "school" part as such constitutes only a small part. In the absence of any known scheme of sectoral analysis, what is presented here, in an experimental way, integrates the various configurations met with, having as a base the distinction between the sectors, institutions and departments (in columns) and the roles and functions (in lines).

1. Sectors, institutions and departments

On the purely descriptive level of installations, an ETSA (Ecole Technique Secondaire Agricole - Secondary Agricultural Technical School:SATS) is made up of three sectors, which are presented on the adjoining table according to the active relationship which binds them with the school as such: the school premises, cultivation and rearing areas, and the various installations for the use of regional rural development; the second sector is further divided into a pedagogical sub-sector; the third sector is also sub-divided into an agricultural rural (properly so called) development sub-sector and another sub-sector of integral rural development (sanitary, religious, etc.).

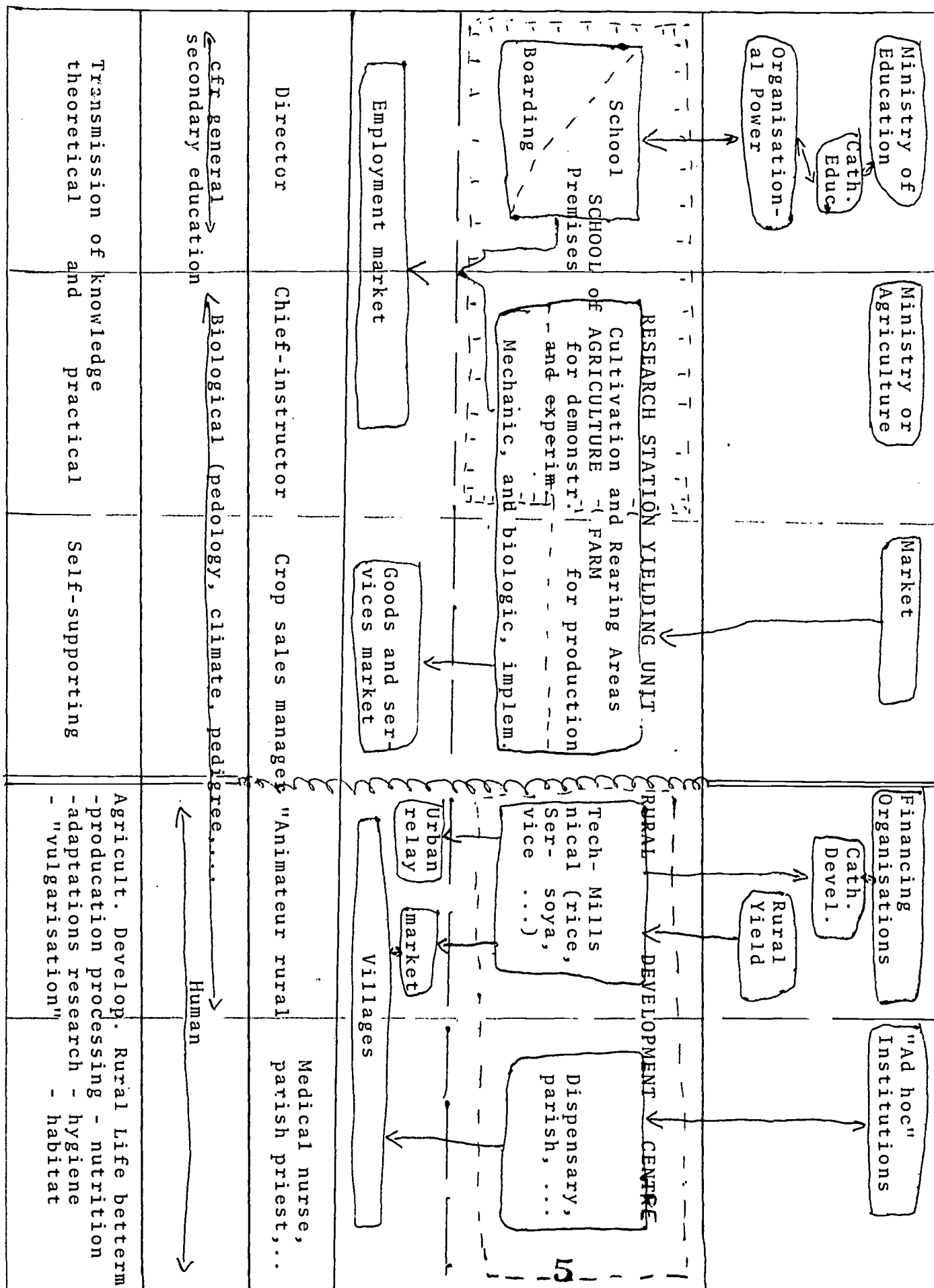
Actually, each of these units, taken separately, constitutes a small institution. These are respectively: the school (boarding or not), the station for demonstration and/or experimentation (furnished with biological and mechanical material on the place), the yielding unit (cultivation and livestock), and the various services for rural development (information, mills for soya, rice, coffee,..., dispensary, parish, etc.). Having their own life and their own logic, these institutions, as such, could function in an autonomous way, as is the case for any school, farm, research station, etc.

Analyzed this way, the SATS looks like a combination of elements which usually do not coexist. What is special and original in the SATS is not the existence of an institution which would be intrinsically tied with it, but in the happy combination

functions Cons- Roles Downstream
traubts

Upstream

SECTORS, INSTITUTIONS and DEPARTMENTS



of elements borrowed from elsewhere. These various elements are organized into three departments: the first department, made up of the school/properly so called and of the demonstration and/or experimentation station, constitutes the "formal agricultural school". In actual fact, official documents ruling this kind of school treat only this part of the global institutional ensemble. However, being also associated with the production unit, the station forms the basis of the second department: the farm (i.e. in the English-speaking world the 'school farm' which has nothing to do with French 'ferme-ecole'). Finally, the ensemble of the services catering for rural development constitutes the rural development centre.

It is useful to round off this description with the distinction concerning the external upstream and downstream institutions with which the SATS has to deal. As far as the upstream goes, the school depends on its organizational power (religious congregation, diocese....) and deals with the ministry of education (often through a central bureau for Catholic education): the farm deals with the ministry of agriculture (sometimes through the afore-mentioned channel); the rural development centre has to do with the financing organisations (through the Catholic central bureau for development), often from abroad; the dispensary, the parish, etc. count on the institutions set up for the purpose ('ad hoc' institutions like dioceses, Public Health Services,...). On the downstream level, the yielding unit goes to the market and the rural development centre deals with the villages, and the same goes for the dispensary and the parish...

2. Roles and functions

Each of these institutions within the school requires the one in charge to take upon himself one or several specific roles. On the teaching level properly so called, it goes without saying, there is no use to distinguish among the director of the establishment, the director of studies and whoever is in charge of the discipline, etc... (nor the role of the religious superior of a community). The running of the farm depends on a man in charge helped by instructors for apprenticeship and experimentation of cultivation techniques that are taught; the responsibility of the mechanic area is often taken up by the one who gives the lessons about agricultural mechanics (often helped by a mechanic). Production needs the services of a crop sales manager, whose role is as much technical as commercial. The centre is directed by an "animateur rural" (rural leader). Finally, the other roles are performed as they crop up (toties quoties).

In what concerns the constraints of running and the functions of the various institutions of the SATS, it is enough to consult the adjoining table.

From the sociological point of view, such a sectoral description calls our attention to some points which are often left in

the dark. Among others we point out the following:

- on the national ministerial level, those in charge of education quite often do not come to take sufficiently into account the heavy biological imperatives particular to this kind of education, when in the decision making process about the allocation of budgetary means, for example.
- the same person often takes on himself several roles of responsibility of the various sectors at the same time; moreover, the agricultural school often seems to be like an amalgam of a school and a rural development centre: these bi-polarities are often the source of profound role conflicts, both among the people in charge of the establishment (director and teachers) and among the students divided in actual fact between the apparently antinomous requirements that are implied by the concrete exercise of the functions of two sub-systems: teaching/learning at school on one side, rural betterment activity in the villages on the other.
- the analysis of what belongs to the numerous inter-relations between the various sectors within the establishment could be pushed further.

On the whole, this stripping of the SATS helps the researcher to put truly pertinent questions and to take them up in a more coherent way that they generally are.

II. The contents of teaching

The formation given at SATS results from its purpose: it aims at educating agronomic technicians for public service (agricultural administration, rural leadership, parastatal research organisms and agricultural offices) and for the private sector (plantations and rearing), of agents of rural cooperatives and of instructors for professional agricultural training. Some people in charge also aim at the training of "modern farmers", but at the present state of affairs, this aim lacks realism. Of course, these objectives are translated in the official programs of the SATS in terms of classes, time-tables, etc., which are periodically changed and revised.

The debates of experts in agricultural education often raised two important problems, actually linked together in a way: the recruitment at the beginning of the cycle and the admission to higher education at the end of the formation process. In dealing with these questions, it is necessary to take into account the numerous data about the Zairian society and about the general structure of education. It suffices to say that since the margin of manoeuvre to favour the recruitment of elements really interested in agriculture is very narrow and that, anyhow, the majority of possible recruits are not interested, the decisive factor is to be looked on the side of the formation process during the cycle rather than on the side of refining the ways of recruitment. In what regards the continuation of agronomic

studies at a higher level, it should not straight-away be criticized for a wastage in educative resources, in the measure in which SATS would have served to give to its students a practical and widely diversified technical formation. Actually, it is not the role of the university to give that type of training, however useful it is for the engineer to understand the concrete coincidences of his laboratory results. In tropical Africa, the agricultural school is one of those rare institutions where the future agronomist could get that concrete information, in contrast with his western confrere who, quite often, would acquire it almost while sucking milk at his mother's breast in his paternal farm.

Actually, the official programs, with their allotment of subjects to be taught, their school rules and their sprinkling of methodological principles of "actual" teaching, do not represent, in comparison the formation process taken as a whole and as it is effectively applied in the field, except the top of an iceberg of which the submerged part, on which rules have rarely applied, is constituted by the type of implements used, the concrete organisation of practical tasks, the school excursions, the participation of students in the activities of rural development, etc. More than the rules, it is those bitter elements which are really determinative in the formation process, as the following few examples go to show.

1. Type of agricultural material

The choices made in this field by the various schools range from an almost exclusive preference given to the manual tools to the deliberately chosen powerful caterpillars, starting with the motor-plough and the tractor... Each of these types of material has its own needs, more exactly, its own logic. Thus for instance, the heavy material, in spite of its nonrentability on the level of the yield of the farm, presents to the students the hall-mark of modern agriculture, such as it is practices in the big agricultural enterprises, private or public. On the contrary, the internal use of that heavy material contributes to strengthen the village dwellers in their highly sensible idea that "modern" agriculture, far from being an example to follow (as it is beyond their possibilities) is in fact nothing but a technological hiatus in the agricultural landscape.

The same reasoning could be applied, all things being equal, to the highly selected biological material (porcine races, etc.).

2. Practical tasks

Most of SATS adopt the system of work teams, charged with the running of the various sections of the farm. Numerous nuances crop up in the concrete modalities of this system: forming the teams, the rhythm of distributing students in the new

teams, rotation of teams all along the different sections, the place of responsibility of the group leader in the running of the section, and even his share in the economic results of the yield. In certain cases, the student in charge, at the end of his term, has to present to his successor a real report of activities.

The result expected, as far as formation goes, is to initiate the group leader to the responsibility of management and command, to prepare him for his future functions. Moreover, the conditions of the set-up differing according to whether the agronomic technician works in the public or the private sector, the more it means that an "animateur rural" is to be trained, the more widely will be applied the principle of subsidiarity or delegation of responsibilities in the management of the small "school" section.

3. Visits to plantations versus visits to villages

The visits to large plantations and rearing farms present the students with the models of realizations on a great scale, both from the technical and the financial point of view. The visits paid to the villagers initiate them on the other hand to the diagnosis of their difficulties, and, in some cases, to the elaboration of a program for agronomic solutions, or even socio-economic ones, which gives them a fore-taste of their future tasks as men in charge of the "animation rurale".

Theoretically, each SATS should initiate its students in each of these two perspectives in practice, however, these seem to be relatively antithetical, due to their exigencies of time available or of the type of agricultural activities in the region.

As the whole, those few examples show that the diversified "eventail" of the finalities assigned to SATS allows each establishment, by adopting such or such a pedagogical system, to attach itself more particularly to the pursuit of such or such a finality: the SATS which caters more specially for the formation of "animateurs ruraux" will limit itself to the betterment of light material, will insist on the responsibility of students in charge of sections, will send its students into the villages, ... and the other way round for the school which chooses to form technicians for plantations and rearing.

Thus, a functional relationship exists between the type of finality retained and its concrete translation on the level of processes of formation. This relationship is so evident that it is almost embarrassing to come back to such truisms. Now, it is enough to pay a visit on the field to be convinced that this finality-process adequation is often misunderstood. The most striking case is that of a SATS where the explicit content of motivations proposed to the students (in the opening speech of the

year, the disciplinary appreciations, the "moralising" exhortations,...) aims at motivating them for work in a village milieu, while the ensemble of the concrete pedagogical system initiates them unilaterally to the models of large agricultural enterprises. Why is it surprising then that the students, submitted to this treatment, consecrate the divorce between the explicit speech and the factual pedagogy by opting for the latter. In such situations, facts often triumph over sermons.

III. Professional choices of the agronomic technicians

It is expected to hear being said that the graduates of the agricultural schools are quick to leave agriculture once they have received their diploma. In the areas of Central Africa, this refrain is often accompanied with some comments on the lack of "agricultural vocation" congenital to the African. Such assertions touch the sociologist in the quick. First of all, it is a question of examining whether this rate of abandon after studies is more marked in Africa than elsewhere, as for example, in the western world. Secondly, it still remains to be seen that the graduates, as a whole, do leave agriculture. A detailed examination of professional careers of the hundreds of Zairian agronomic technicians graduated since 1938 reveals that the percentage of abandoning does not seem to surpass 40%, even when pessimistic estimates are taken into account. This figure is based on a careful examination of 792 graduates of whom we could find the names. The state of the archives, victims of the aftermath of Independence, undoubtedly shows illusory the hope of reconstructing the complete statistical series and a fortiori of completing the names lists. The total number of graduates (up to 1970) could be estimated round about 1,000.

Being authorized to suggest a percentage of 60% of "faithful" does not, however, totally convince those who hold this prejudice. Faced with this figure, which should push them towards optimism, these people use two other arguments. The first often boils down to this epithetic formula: "Show me one of my old students who has become a farmer." It is clear that this rare bird is not to be found. Now, the simple irrefutable character of this kind of challenge reveals by the very fact that there must be some fault in the reasoning. Actually, it is perfectly normal that not a single agronomic technician sets up on his own; the contrary would even tend to show that the school has not fulfilled its function, which is not to dispense a professional training as such (that is the very role of the Ecoles Professionelles Agricoles). For, in the social conjuncture of these developing countries, it is utterly unrealistic to believe that a young man, whose diploma certifies that he is trained in modern agriculture and promised with rapid administrative careers, at this point would be lacking good sense were he to think of putting himself up as a farmer, that is to say in the case of the Zaire, to bring out of the brush - or worse still out of the forest - a

new agricultural enterprise, without money and without credit while he is perhaps still unmarried. It is good to think of the difficulties encountered in Europe by young farmers' sons who, following the unexpected death of their father, for instance, find themselves at the head of the family farm. In that case it is a question of a yield well set up. This kind of complaints is not to be put at the door of agricultural education, but are to be attributed to a subjective error in the conception of the finality of this education on the part of those responsible. In other words, it is highly possible that one school is really functional and adequate, but is paradoxically seen to be dysfunctional by its promoters.

Once this is admitted, the question comes up again sometimes under another form: "Perhaps there are many who stay in agriculture, but they become bureaucrats in the agricultural administration." And to favour, consequently, such elements as looking down on agriculture, the attraction of the city, etc. A more attentive analysis of outlets effectively offered allows nuancing this judgement on the "spare-parts":

- 5% stay on so well in agriculture that they acquire diplomas from higher agronomic education;
- some have been integrated into the teaching staff of the agricultural schools themselves;
- the private agricultural sector, the big enterprises, offers only weak outlets;
- in the public agricultural sector, the situation has deteriorated these past years. Before independence, young graduates were almost sure of employment in these services. From the very first months after independence, this sector faced a tragic situation caused by a massive and sudden departure of European personnel. The void created in the central offices had to be filled in by recalling agronomic technicians from the interior, very badly prepared besides for these administrative tasks, but who, on the other hand, had become ineffective on the field because of the disappearance of the framing structure by the former European agronomists. This movement has been even so much spread, in favour with the clan solidarity and the principle of tribal equilibrium, that a process of bureaucratic plethorisation has been set loose, rendered still more lively, indeed by the attraction of the town and above all by the vertiginous acceleration of professional advancement, often required by the exodus of the old colonizers.

Since 1968, the situation has worsened: the Ministry of Public Function has reacted against this plethorisation process by completely stopping the engagement of supplementary units. Now, in 1971, 174 technicians got their diploma. What can they become? Finding themselves hemmed in between the hammer and the anvil, these young people seek to break this encirclement by trying to acquire a higher educational status, if possible in agronomic and related sciences, or by becoming teachers in

secondary schools (lower level). This second mouvement presents favourable occasions - still unexploited - for a ruralisation of the education, a subject so dear to many experts. The others, giving up all hope in the matter, use all sorts of expediciencies.

This situation, which led some agronomic technicians first to become bureaucrats, then to give up agriculture at least for some time, is deeply worrying. It is all the more unfortunate that the country has a crying need for an agronomic structure in the field. However, the Agriculture administration directors know that the solution does not consist by employing more technicians, but by getting the best out of the personnel already existing. And also, this search for efficiency will be made easier by a serious reduction of an over-numerous personnel.

What is tragic is that agricultural schools, buried in the brush, do not realize that every year they send on the employment market dozens of young people who will, at present, almost surely be condemned to abandon agriculture. This situation finally puts the problem of a revision of the rhythm of production in agricultural education, which would take into account the conjuncture of the employment market. It may be asked in what measure the functioning of the agricultural school is not unduly subjected to that of the adjacent rural development centre, to which students give highly precious services on the title of their preparation for their future tasks as "animateurs ruraux". This recalls the situation of the schools for nurses in the big hospitals.

IV. Localization of the SATS and rural development

It goes without saying that the localization of a SATS greatly influences its functioning. Each spontaneously imagines a school surrounded by fields and plantations at the heart of a region known as being "agricultural" and broadcasting the good deeds of a rational agriculture in concentric circles evolving around this innovating centre. Alas, reality is different: several SATS' are set up in the heart of the city, while others - among the best ones - are situated on the outskirts of agglomerations. This means that the dualist way of dividing the territory into town and interior (hinterland) has to be left behind; there are in fact, four kinds of sites:

- a) an urban zone, as all agglomeration endowed with an air connection or a tarmac highway;
- b) a peri-urban zone, defined not in terms of kilometric distances, but of time distance: that is, the neighborhood in a 'radium' of a quarter by car;
- c) a urban "couronne": between about 20 minutes and an hour of road;
- d) the hinterland, i.e. the rest of the country.

Let us examine more closely the situation of a SATS in each

of these sites.

1. The SATS in the urban zone

Urban ecology implies the absence of a boarding school, and, often, the lack of vital agricultural space; it is even more out of the question of big rearing or practicing the fallow system. This results in serious handicaps for the practical formation. Besides, the school public is fatally urbanized culturally speaking. From this, follows a serious pedagogical deficit on the whole.

Thus are known the deceptions which since a dozen years these agricultural schools nourish, as, following political troubles brought about by independence, they were suddenly transplanted into urban zones, and this in spite of the fact that they had been promoted on that occasion from the rank of lower training schools (EPA) to that of SATS of which the theoretic needs appeared to be more adapted to the urban context. Very recently, however, one of these urban SATS, after an inquiry on professional choices of its graduates, converted itself completely to form technicians for agricultural and alimentary industries, naturally situated in the agglomerations, since anyway its agronomic technicians joined these enterprises. This change made it possible for it to find again an aim perfectly agreeing with its localization, without taking away from its character as an agricultural school.

2. The Peri-urban Zone

There is no SATS in this kind of site. Still, it shares in the same situation as the former one, while account is taken of the fastness of the rate of urban growth.

3. The SATS in an urban "couronne"

This SATS is sufficiently far from the city to dispose of adequate space; it resolves the problem of financing by the activities of production. It boasts of a boarding compound where the students live mostly coming from a rural milieu. On the condition of not being included into a school complex of the same level of study, it is a small agricultural centre where the students live in the midst of cultivation and rearing, and where the class does not appear at the end but as part of a larger ensemble. Besides, the environment offers opportunities of formation through work in the agricultural enterprises and/or in the village milieu.

Far from the city, the SATS is in any way also sufficiently near to be assured of the capacity of indispensable breathing: postal service (for the files about financing, the results of chemical analysis, the exchange of information, etc.), visitors bringing new ideas, transport of vaccine and first-day chicks, etc...

(cf Weintraub, 1970).

4. The SATS in the hinterland

Here, finally, is the SATS isolated in the brush imagined further up: sensitive to the political insecurity, infavoured in its recruitment of teaching personnel, cut off from the outside world, looked upon by the school public more as a school than as an agricultural school,... A general secondary school establishment could do with such a isolation, but not a SATS: there it is condemned to die asphyxiated, a slow agony which sometimes, it is true, is prolonged by dispensing periodically oxygen tubes...

This new approach allows the selection of two zones of functional localization according to the various types of SATS. On one hand, in an urban zone, the SATS with a program towards agricultural industries, and on the other hand, in an urban couronne, the SATS with a program preparing for agricultural enterprises or, at the opposite, for "animation rurale"; the other implantations being clearly unfunctional.

The same type of reasoning, once it is applied to the analysis of actions of rural development done through the SATS's leads to the abandonment of the frequent stereotype of concentric diffusionism. Actually, the villages that are most reached by these activities are not necessarily those which surround the school, but rather those which are reached by the organisms of rural development whose headquarters are situated in towns and for which the SATS plays the role of technical service, let alone that some villages are reached very near the school. Thus, the road from the school to the village goes through the town, as paradoxical as it may seem at the first sight. And once an autonomous program of rural development is carried out by a SATS in its immediate surroundings, its expansion rapidly reaches the ceiling. Actually, the SATS does not dispose either of an urban infrastructure or of resources in personnel and in money so that it could carry on its own the burden of such an activity. Thus it is a great risk to put all the activity of the establishment on its department of rural development, at the detriment of the school department, and finally of the education of the students. Everyone remembers the fable of La Fontaine about the frog who wanted to grow fatter than the bull... In other words, the activity of regional rural development carried out by the SATS tend to become amplified by the channels town-hinterland.

The same line of thought could still show that a healthy conception of what we called the "rural centre" at the heart of the establishment requires in fact that this be precisely fundamentally decentralized.

V. A four-fold problem: the lack of prestige

Literature often takes up the refrain of the lack of prestige of the agricultural schools and with much exactness sometimes tries to propose some explanations and solutions. However, these texts often sin by not retaining except this or that more striking trait, on the risk of ignoring other equally important elements; the care is thus left to those responsible to find their way in this maze of disparate arguments which are ultimately hardly operative. Perhaps one of the advantages of the analytical framework proposed here is that it allows a global and coherent grasp of such questions.

First of all, on the organization level, it could be written that "once an agricultural school is organized at the same time as the other schools within the same school centre, the section is invited to perish and disappear. It is the result of the small prestige of the agricultural profession in the eyes of African populations." (Deheyn, 1957:3) This hypothesis is verified on the condition of its being refined by precisising: "on the same level of studies". An isolated agricultural school, or a school of a lower level of studies than that of other units in the same school complex, thus avoids this reef. The question then comes back in what concerns holidays: SATS students often complain of being looked down upon by the students of other sections, who tell them that they do not need to go to school to "learn how to plant cabbages". This very real situation has driven some SATS's - on the level of the contents of education - to pivot their recruitment propaganda on their laboratories "among the most modern... true centres of scientific research" and on their teachers, having university degrees and "members of foreign technical cooperation missions". And in fact, the students of these schools show their pride from the scientific character of their formation and they are not bothered to outwit their holiday companions by proving to them that they are able to look after vegetal or animal illnesses, or to detect bottle-necks in agricultural production.

On the occupational level, the professional status of the agronomic technicians is very differently looked at: working in the private sector generally confers on him a true prestige, thanks to the high visibility of the advantages of this career (increased treatment, house and car furnished by the company, etc.). On the contrary, for him whose employer is the State, the enjoyment of those advantages, although assured "on paper", will be much more precarious. Actually what is still more important than the capacity for consumption and ostentation is that he shall be bullied in the exercise of his role of authority by the arbitrary prerogatives of his hierarchical superiors.

This last aspect, internal to the body of state civil servants, hardly studied as yet - seems to combine its negative

effects with another situation, this time external: one is often led to hardly believe that a SATS graduate could successfully take charge of the "animation rurale": too young for a gerontocratic society, a man before an agriculture principally practiced by women,... Yet, on the level of rural development, the activities carried out by the SATS's reveal on the contrary that these opposition couples (young-old, male-female,...) are neutralized by the technical competence of the students.

Such an approach seems to be more able than a partial approach to help those responsible for agricultural education in the decision making process.

Conclusion

Those few examples of the application of our analytical framework do not exhaust the possibilities; many other aspects could be put into the light. However, they already suggest that an even greater attention could be given to the definition of the type of agronomic technician who is to be trained. Except in rare instances every year the present SATS's introduce on the employment market dozens of elements especially cut to the model which the school made for itself. The SATS's are not, however, to be charged with this situation: before independence, they "produced" in function of the sort of profile which the State, the principal employer, assigned to them. For the past 12 years this feed-back control effect of production has disappeared, condemning the schools to work blindly. This comes into flagrant contradiction with the fundamental principle of the new tendency of the marketing: to produce in function of the quantitative and qualitative market demand, and not to impose on the market the type of produce which suits the unit of production.

This turning-round of perspectives thus brings about a recrudescence of sociological studies on the agronomic corps of the State, and anthropological studies on the rural milieu.

All along his "demarche", the researcher has to keep in mind this reflexion full of good sense of an "animateur" from Madagascar: "Once the technical agents get together to discuss the price of our products, or to realize a channel, we want to be there for we are as responsible as they are for the application of this decision; we are often not in touch with what they decide, but this is an order which we get. As we, ignorant and illiterate people that we are, we already understand the inadaptability or rather the inefficiency of their plan. And once failure is encountered, it is the technicians who accuse us of being responsible while it is their theory which does not coincide with the reality in the field". (Goussault, 1970L7)

Bibliography

BANKS Olive, The Sociology of education, London: Batsford Ltd, 1971 (1968), 234pp.

- COOMBS P.H., La Crise mondiale de l'education, Paris, P.U.F., 1968, 322 pp.
- COOMBS P.H., Planification de l'enseignement et de la formation agricoles dans le cadre d'une approche integree du developpement rural, in Food and Agriculture Organisation, Rapport de la Conference mondiale sur l'enseignement et la formation agricoles, vol. 1, pp. 149-160 (Rome, Doc. RU:AET/70).
- COOMBS P.H., L'Education pietine, in Ceres, Revue FAO, vol. 4, n° 3, mai-juine 1971, pp. 23-25.
- de FAILLY D., Histoire de l'enseignement agricole au Congo, in Cahiers Congolais, vol. 13, n° 2 (juine-juillet 1970), pp. 43-70.
- DEHEYEN J.J., Realisations et objectifs de la Belgique en matiere d'enseignement agricole au Congo belge, in Bulletin Agricole du Congo belge, vol. XLVIII, n° 1, (fevrier 1957), pp. 1-22.
- GOUSSAULT Y., L'Animation rurale dans les pays de l'Afrique francophone, Geneve, Bureau International du Travail, 1970, 186 pp.
- WEINTRAUE D., Rural periphery, societal center, and their interaction in the process of agrarian development: a comparative analytical framework, in Rural Sociology, vol. 35, n° 3 (September 1970), pp. 367-376.